



AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method of forecasting future orders of parts for products sold to customers, comprising the steps of:

determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show an order rate to have fallen below a predetermined level;

determining from each such order record at least one parameter indicating a characteristic of orders after the order rate fell below the predetermined level, classifying the extracted low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period,

wherein the parameter indicating the characteristic of orders is a ratio of number of orders.

2. (Currently Amended) A method according to claim 1, further including the steps of:

determining a time-course record of orders with respect to each part and extracting second low-order-rate parts whose order records show an order rate to have fallen below a second predetermined level higher than said predetermined level;

classifying the extracted second low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions of the second low-order-rate parts to determine occurrence rate probability distributions of number of orders during a predetermined period;

calculating future number of orders of the second low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period; and

forecasting the future number of orders of the second low-order-rate parts by regression analysis based on order records before order rate fell below the second predetermined level and the calculated number of orders.

3. (Canceled)

4. (Canceled)

5. (Currently Amended) A method according to claim 1 [[3]], wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

6. (Currently Amended) A method according to claim 2 [[4]], wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

7. (Currently Amended) A method of forecasting future orders of parts for products sold to customers, comprising the steps of:

determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show an order rate to have fallen below a predetermined level;

determining from each such order record an order occurrence probability distribution as a function of time and an order occurrence probability distribution as a function of a ratio of number of orders;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

8. (Original) A method according to claim 7, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

9. (Original) A method according to claim 7, wherein the extracted low-order-rate parts are classified into multiple categories and the order occurrence probability distribution is determined for each of the multiple categories.

10. (Original) A method according to claim 1, further including the steps of:
checking accuracy of the forecast number of orders; and
changing the categories based on a result of checking.

11. (Original) A method according to claim 7, further including the steps of:
checking accuracy of the forecast number of orders; and
changing the categories based on a result of checking.

12. (Currently Amended) A system for forecasting future orders of parts
for products sold to customers, comprising:

time-course order record determining means for determining a time-course
record of orders with respect to each part and extracting low-order-rate parts whose
order records show an order rate to have fallen below a predetermined level;

order occurrence probability distribution determining means for determining from
each such order record at least one parameter indicating a characteristic of orders after
the order rate fell below the predetermined level, and for classifying the extracted low
order-rate parts into multiple categories and using the parameter indicating the
characteristic of orders to calculate for each of the multiple categories an order
occurrence probability distribution;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on
the calculated order occurrence probability distributions to determine occurrence rate
probability distributions of number of orders during a predetermined period; and

forecasting means for forecasting future number of orders of the low-order-rate
parts based on the calculated occurrence rate probability distributions of number of
orders during the predetermined period,

wherein the parameter indicating the characteristic of orders is a ratio of number
of orders.

13. (Currently Amended) A system according to claim 12, further including:

second time-course order record determining means for determining a time-course record of orders with respect to each part and extracting second low-order-rate parts whose order records show an order rate to have fallen below a second predetermined level higher than said predetermined level;

second order occurrence probability distribution determining means for classifying the extracted second low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions of the second low-order-rate parts to determine occurrence rate probability distributions of number of orders during a predetermined period;

order calculating means for calculating future number of orders of the second low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period; and

forecasting means for forecasting the future number of orders of the second low order-rate parts by regression analysis based on order records before order rate fell below the second predetermined level and the calculated number of orders.

14. (Canceled)

15. (Canceled)

16. (Currently Amended) A system according to claim 12 [[14]], wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

17. (Currently Amended) A system according to claim 13 [[15]], wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

18. (Currently Amended) A system for forecasting future orders of parts for products sold to customers, comprising:

time-course order record determining means for determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show an order rate to have fallen below a predetermined level;

order occurrence probability distribution determining means for determining from each such order record an order occurrence probability distribution as a function of time and an order occurrence probability distribution as a function of a ratio of number of orders;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting means for forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

19. (Original) A system according to claim 18, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

20. (Original) A system according to claim 18, wherein the extracted low-order-rate parts are classified into multiple categories and the order occurrence probability distribution is determined for each of the multiple categories.

21. (Currently Amended) A system according to claim 12, further including the steps of:

checking means for checking accuracy of the forecast number of orders; and

changing means for changing the categories based on a result of checking.

22. (Original) A system according to claim 18, further including the steps of:

checking means for checking accuracy of the forecast number of orders; and

changing means for changing the categories based on a result of checking.